

**METHOD FOR OPTIMALLY SIZING CELLS OF A CENTRIFUGAL
PARTITION CHROMATOGRAPHY DEVICE**

ABSTRACT

Method for sizing the cells of a centrifugal liquid-liquid chromatography "column" (CPC column) consisting of stacked discs on which the cells connected in cascade (in series) by small channels are engraved. Rotation of the stack creates a high centrifugal acceleration field which makes it possible to keep a liquid phase referred to as stationary phase motionless, whereas a mobile phase circulates along the CPC column. The cells are three-dimensional, with two dimensions (L, I) of the cells oriented in a plane substantially normal to the axis of rotation (Ω) of the disc and a third dimension (e) oriented in a direction substantially parallel to the axis of rotation, and selected so as to be at least equal to one of the other two dimensions (L, I), thus providing higher efficiency. When the scale of the devices has to be changed, the size of the cells is modified ensuring that, in any case, this third dimension (e) is favoured so as to be as great as possible.

Applications: design of analytic or preparative chromatography devices.